NEW HORIZON COLLEGE OF ENGINEERING

50 Golden Jubilee YEARS OF EXCELLENCE IN EDUCATION

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

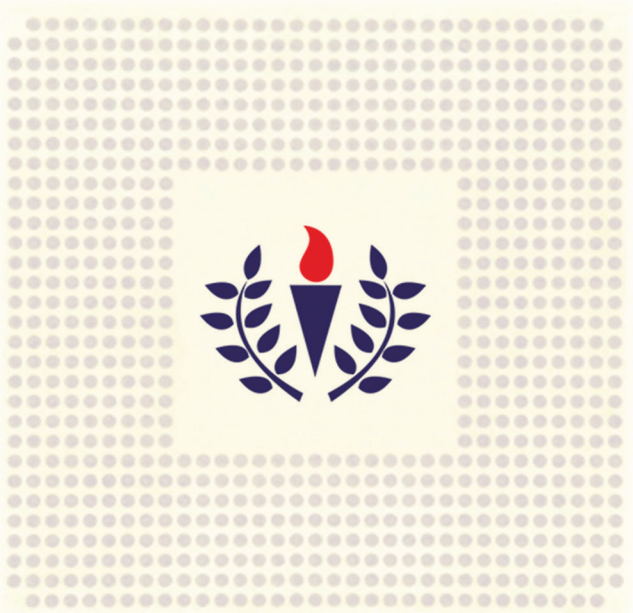
CURRENTS - NEWSLETTER

EEE - we Light the world

EEE

2020
AUGUST TO DECEMBER

Volume 9
Issue 1



ABOUT DEPARTMENT

Welcome to the Department of Electrical & Electronics Engineering (EEE) at New Horizon College of Engineering (NHCE), Bangalore. EEE is one of the prestigious branches of Engineering and one among the oldest departments of NHCE-Bangalore started in 2001. The EEE Department has been playing a vital role in producing engineers and technologists of high caliber ever since it was established in the year 2001. The Department is accredited by NAAC with 'A' Grade and accredited by NBA. The vision of EEE Department is to create contemporary Engineers, innovators and entrepreneurs to make a better nation and in turn, a better world. A critical investigation and innovation into the modern state-of-art and cutting edge technology lead to the fact that an electrical graduate fits better in today's competitive world.

The strength of the department is highly qualified faculty members with expertise in various fields of electrical engineering, state of art laboratory facilities. The department is inclined towards bridging the gap between Industry and academia by collaborating with Multinational Companies in the field of Electrical Engineering.

Indo-French Center of Excellence in Electricity, Automation and Energy (IFCEEAE) is one such initiative evolved through "MoU" with French Ministry of National Education and Schneider Electric India Pvt. Ltd., The main objectives of IFCEEAE are

- To train the students of all streams of engineering in automation field
- To facilitate interdisciplinary and applied research with a focus on innovative product development
- To provide excellent career opportunities to students through exchange programs with French Universities, industrial training, innovative learning and R & D activities especially in the areas like Smart Grid, Internet of things (IoT), Energy Management Systems, Embedded systems, Supervisory Control and Data Acquisition (SCADA) and industrial automation.

The Department nurtures the young minds beyond the curriculum by facilitating technical clubs in promoting technical events, community development/society impact and universal value/ethics programs. Electrical & Electronics engineering students have a greater exposure and flexibility in campus placement both in core industries, IT sectors and Public Sector Units.

VISION

To evolve into a centre of excellence in Electrical and Electronics Engineering for bringing out contemporary engineers, innovators, researchers and entrepreneurs for serving nation and society.

MISSION

- To provide suitable forums to enhance the teaching-learning, research and development ac tivities.
- Framing and continuously updating the curriculum to bridge the gap between industry and academia in the contemporary world and serve society.
- To inculcate awareness and responsibility towards the environment and ethical values.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

PEO 1: To provide good learning environment to develop entrepreneurship capabilities in various areas of Electrical and Electronics Engineering with enhanced efficiency, productivity, cost effectiveness and technological empowerment of human resource.

PEO2: To inculcate research capabilities in the areas of Electrical &Electronics Engineering to identify, comprehend and solve problems and adopt themselves to rapidly evolving technology.

PEO3: To create high standards of moral and ethical values among the graduates to transform them as responsible citizens of the nation.

MESSAGE FROM PRINCIPAL & HOD

Dear all,
In our college, we and our faculty always think we need to teach beyond curriculum so as to make our students 'Industry Ready'. Recent observations made by many stalwarts in the industry indicate the fact that a majority of Engineering Graduates out of colleges are not employable. NHCE has always been in the forefront in ensuring that students are employable. It gives me immense pleasure to pen a few words as prologue to the in-house 2020 Newsletter of the EEE Department. The issue is designed to present the events that have occurred as well as technical write-ups which makes the issue resourceful and informative. I congratulate all the contributors and also the editorial board for bringing out such a nice issue. Happy Reading.

Dr. MANJUNATHA
PRINCIPAL, NHCE

Dr.M.MAHESH
HOD EEE,NHCE

Dear readers,
I feel happy to release Newsletter titled as "Currents" 2020. Our editorial team has done an appreciable job in reporting all the events which have taken place in the Department over a time period of five months, even during this pandemic. As an icing on the cake, our Newsletter is presenting you the success of major events witnessed by students and participants of Electrical Engineering fields. The objective of the Technical Newsletter is to inform, engage, inspire and entertain a diverse readership including students, faculty, parents and alumni- with a timely and honest portrait of our Department activities. This chronicle has made an earnest attempt in this direction and all the credit for its success falls upon faculty and students who have worked with dedication and enthusiasm to bring this forward. I convey my regards to all the readers.

EDITORIAL TEAM

FACULTY ADVISORS

Dr.M.MAHESH
HOD EEE,NHCE

Prof. RASHMI N

Prof. DEEPA V.B

STUDENT CO-ORDINATOR

Mr. NISCHAL DINESH

MOMENTS OF THE DEPARTMENT

Mr.Thomas BRIERE from France has been appointed as Director of Indo-French Centre of Excellence Electricity, Automation and Energy (IFCEEAE) and Dr. M. Mahesh, HOD EEE is appointed as Co-Director of IFCEEAE.

The Department of Electrical and Electronics Engineering arranged an interactive session with faculty with the Director from France. Dr. M. Mahesh, HOD EEE welcomed director Mr.Thomas BRIERE whole heartedly on behalf of Department, faculty, students of NHCE . Mrs. Deepa V B introduced the director professional credentials and recognitions earned during his career, which conveyed directors achievements the all assembled people.

The Director interacted with faculty by defining the importance of automation, suggested faculty to come up with R&D proposals in automation and extended his support in carrying out research activities in the automation field. Later faculty also introduced themselves to the director mentioning their area of interest which received appreciation from him.

Also, in this moment few faculties are honored to receive Certificate of Appreciation from Mr. Thomas BRIERE Director of IFCEEAE, Schneider Electric, for empowering para teaching faculties in Three-day hands-on Workshop on “Introduction to Data Entry/ Analysis Using Microsoft Excel & amp ; Introduction to Arduino Embedded System” which was organized by QASDC Department of NHCE and in association with Department of EEE.

STUDENTS ACHIEVEMENTS

DECEMBER EVENT:

Congratulations to the winners Arnab Goswami, Shruthi Singh, Swati of 1st year of NHCE and Nayrah from 5th semester EEE of "War of Words"a debate challenge that was organised by Green energy Clubby organizer Mr.Vinod kumar S, faculty, Department of EEE, New Horizon College of Engineering.Around 60 studentsparticipated in the event from various Departments of NHCE. Hearty congratulation by HOD & faculty to all the winners.

OCTOBER EVENT:

Congratulations to SUSHMITHA T S, DARSHINI MACHAMMA M S, NAYRAH M A, NISCHAL DINESH, SARTHAK DAS students of 5th semester, Electrical & Electronics Engineering Department, NHCE for attending online Short term courses organized by NITK-STEP & Department of EEE, National Institute of Technology Karnataka, Surathkal, in the month of October 2020, under the guidance of Dr.Vinoth Kumar K.

Students gained knowledge on courses they opted and shared positive feedback for the session they attended for about a week during this pandemic. Here are the shared certificates of participation. Students attended courses like "Design and Control of Power Electronic Converters & its Applications and PCB Design using Open Source Tools".

NITK Science & Technology Entrepreneurs' Park (NITK-STEP)
&
Department of Electrical and Electronics Engineering
National Institute of Technology Karnataka, Surathkal
Srinivasnagar, Mangalore-575025, Karnataka, India

Certificate of Participation

This is to certify that ***DARSHINI MACHAMMA M S, NEW HORIZON COLLEGE OF ENGINEERING*** *has participated in the Self-Financed Online Short-Term Course on* ***Design and Control of Power Electronic Converters and its Applications*** *jointly organized by NITK-STEP & Department of Electrical and Electronics Engineering, National Institute of Technology Karnataka, Surathkal, from 19th to 23rd October, 2020.*

Dr. B. Dastagiri Reddy
Program Coordinator
NIT Karnataka, Surathkal

Dr. Venkatesaperumal
Professor, In-Charge
NITK-STEP

NITK Science & Technology Entrepreneurs' Park (NITK – STEP)
&
Department of Electrical and Electronics Engineering
National Institute of Technology Karnataka, Surathkal
Srinivasnagar, Mangalore – 575025, Karnataka, India.

CERTIFICATE OF PARTICIPATION

This is to certify that ***Nischal Dinesh, New Horizon College Of Engineering*** *has participated in the Online Short-Term Course on* ***PCB Design using Open Source Tools*** *jointly organized by NITK-STEP & Department of Electrical and Electronics Engineering, National Institute of Technology Karnataka, Surathkal, from 26th to 30th October, 2020.*

Dr. V. Vignesh Kumar
Program Coordinator
NIT Karnataka, Surathkal

Dr. B. Venkatesa Perumal
Professor In-charge, NITK-STEP
NIT Karnataka, Surathkal

Pic: Certificates of online Short-term courses organized by NITK-STEP

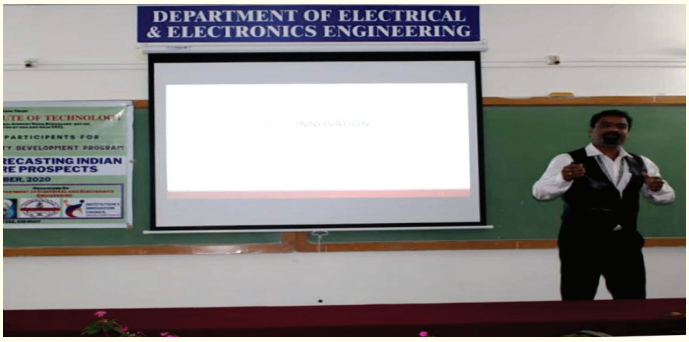
FACULTY ACHIEVEMENTS

DECEMBER EVENT:

Congratulations to Dr. M Mahesh, Prof. & Head Electrical & Electronics Engineering Department for being recognized as resource person for AICTE sponsored two weeks Faculty Development Program (Off-Line) - at Sir M. Visvesvaraya Institute of Technology, Bengaluru, on 10-12-2020. Delivered lecture in two sessions as mentioned below.

Session 1: Overview and advancement of peak load saving methods using smart grid technologies

Session 2: High power density trends, converters for various power applications.Program was conducted successfully with positive feedback from participants.



Pic: Dr.M.Mahesh, resource person in AICTE sponsored two week FDP at Sir M.V Institute of Technology, Bengaluru

Congratulations to Dr.Vinoth Kumar K, Associate Professor from Department of EEE, NHCE has been elevated / promoted to IEEE Senior Member Grade dated on 23rd November 2020 by Dr.Toshio Fukuda IEEE President and CEO, USA.
The IEEE Senior membership is an honour bestowed only to those who have made significant contributions to the profession.

SEPTEMBER EVENTS:

- Congratulations to Dr.Vinoth Kumar K, Associate Professor from Department of EEE, NHCE delivered the lecture in National Webinar on "Condition Monitoring of Electrical Machines" at Nehru Institute of Engineering and Technology, Coimbatore on 27th September 2020.

Congratulations to Dr. Mohan Das as he was recognized as a Resource Person & delivered Keynote addresses in VSB college of Engineering. The event was an AICTE Sponsored FDP/STTP Phase-II " Formal Modeling, Control and Real Time Implementation of Cyber Physical Systems " on 18th November 2020, 10.00 AM for faculty and Students of AICTE Institutions. Program was conducted successfully with positive feedback from participants.

BOOK / PAPER PUBLICATIONS BY FACULTY:

Congratulations to Dr.VinothKumar.K. for publication on the topic., "Performance based algorithm for DWT and DCT for ISL". Materials Today Proceedings, in Elsevier, Publisher Date of submission / Expected: 29 August 2020 , Status: Published in Online 11 December 2020.

- Congratulations to Dr. VinothKumar.K. for publication on topic "The generalized non-linear fresnel transform and its application to image encryption". Materials Today Proceedings, in Elsevier, Publisher Date of submission / Expected: 16 October 2020 , Status: Published in Online 10 December 2020

- Dr. Vinoth Kumar K published a book titled "Model Based Design of Power Electronics Multi-Paradigm Numerical Computing", LAMBERT Academic Publishing Mauritius, First Edition, September 2020. ISBN: 978-620-2-68039-4

- Congratulations to Dr.B.Gunapriya, Associate Professor, for the paper publication on Interleaved Boost Converter Based Photovoltaic Array System Employing Fuzzy Based MPPT for the Rapid Change of Solar Irradiance, BBRC- Bioscience Biotechnology Research Communications Special Issue Volume 13 Number (4) 2020

- Congratulations to Dr.B.Gunapriya, Associate Professor, for the paper publication on Frequency control of PV-connected micro grid system using fuzzy logic controller, https://doi.org/10.1016/j.matpr.2020.10.255- Materials Today Proceedings Elsevier / ISSN: 2214-7853

- Congratulations to Dr.B.Gunapriya, Associate Professor, for the paper publication on Improved Brain Emotional Learning Based Intelligent Controller for Brushless DC Motor Drive, Journal of Green engineering, alpha publishers-JG Engg -ARTICLE IN PRESS-Available online 18 December 2020

- Congratulations to Dr.B.Gunapriya, Associate Professor, for the paper publication on Realization of Virtual Environment through LabVIEW Platform Ref. No.: MATPR-D-20-06957R1--ARTICLE IN PRESS-Available online 18 December 2020

- Congratulations to Dr.B.Gunapriya, Associate Professor, for the paper publication on BELBIC study for PMBLDC Motor drive system in Industrial applications, Vol. 700, Lecture Notes in Electrical Engineering, Springer /ISBN 978-981-15-5262-Advances in Automation, Signal Processing, Instrumentation and Control- Article in Press-Available online December 2020

Congratulations to Dr.B.Gunapriya, Associate Professor, EEE, NHCE for the contribution of following PATENTS along with team members.

- titled SOLAR POWERED ELECTRIC TRICYCLE FOR PHYSICALLY CHALLENGED PERSONS and got patented on 20/11/2020, with Application No. 202041049220A

- titled DETECTION OF ROTOR FAULTS ON SYNCHRONOUS MOTOR USING MOTOR CURRENT SIGNATURE ANALYSIS AND INSTANTANEOUS POWER ANALYSIS METHOD and got patented on 03/10/2020, with Application No. 202011043068

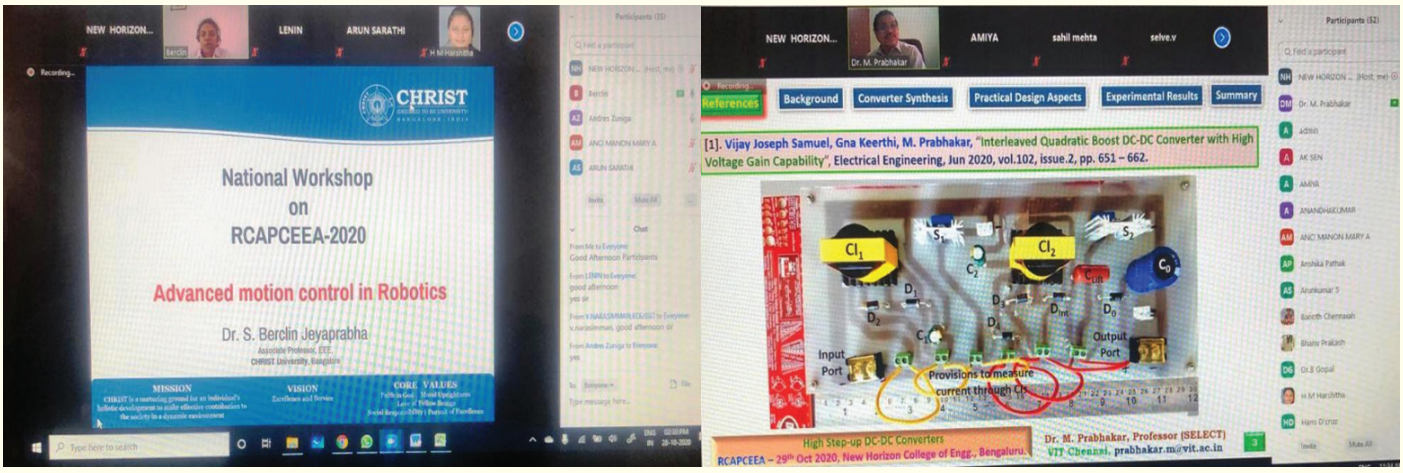
- titled FILED A PATENT ON AN IMPROVED BELBIC CONTROLLER FOR PMBLDC MOTOR DRIVES USING EMOTIONAL LEARNING TECHNIQUES and got patented on 07/08/2020, with Application No. 202041030788 A

OCTOBER EVENTS:

- Congratulations to Dr.Vinoth Kumar.K. for publication on the topic "Performance analysis of QZSI for PV integrated grid system", in International Journal of Advanced Trends in Computer Science and Engineering, in October 2020.

- Congratulations to Organizer Dr.Vinoth Kumar K and Dr.Gunapriya B from Department of EEE, New Horizon College of Engineering has organized the AICTE Sponsored "National workshop on research challenges in advanced power converters for electrical engineering applications - RCAPCEEA-2020" in association with IEEE NHCE from 27th – 29th October 2020, in two Session from 11.30 AM - 1.00 PM & 2.30 PM – 4PM for Faculty, Research Scholars and for Students of all the Engineering Colleges / Universities and also for people working in Industries, via online ZOOM platform.

Program defined the concept of current research trends in advanced power converters strategies for electrical engineering applications domain. Generally power electronics is interdisciplinary in nature and is used in a wide variety of industries from areas of energy storage systems and charging infrastructures for electrification applications. It is envisaged that this program facilitates researchers, industry, academia and students to apply the current research challenges of digital control pertinent to the power electronic converters and drives with electrical engineering applications domain. The program aspects are advanced power converter techniques of energy saving scheme in electric drives, motion control in robotics. The Eminent experts from academia and Industry delivered the lectures in the workshop program.

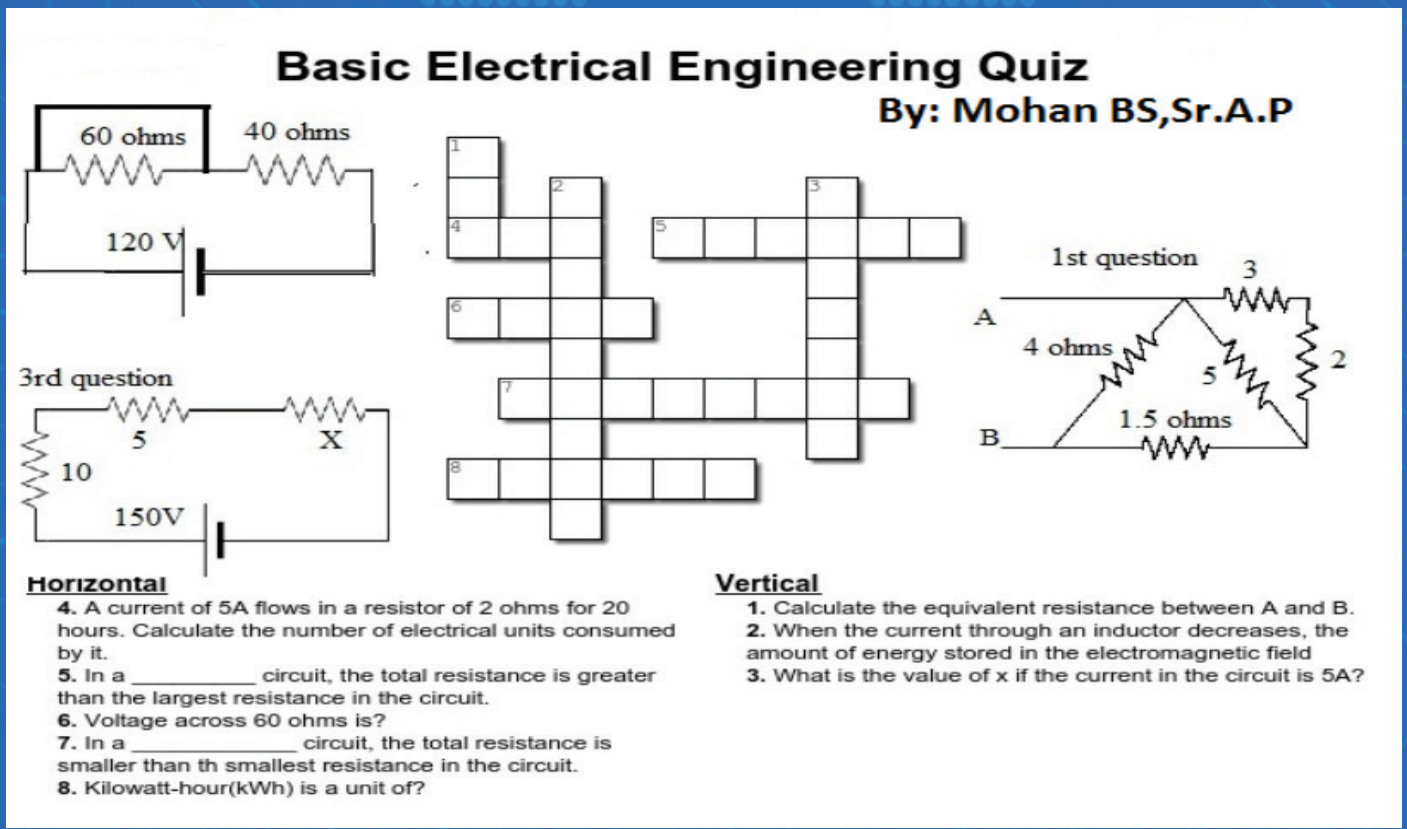


Pic: National workshop on research challenges in advanced power converters for electrical engineering applications - RCAPCEEA-2020

AICTE SPONSORED SHORT TERM TRAINING PROGRAM

The Department of EEE, New Horizon College of Engineering organized the Six days online - AICTE Sponsored Short Term Training Program on "Smart Grid Technologies for Energy Efficiency and Active Demand Side Management Phase 1: - "Introduction to Smart Grid Technologies; Opportunities and Challenges in Future world – Case Studies". During 7th to 12th December 2020. Faculty from various intuitions have benefited by attending this six days STTP. The main aim of this STTP is to train the trainer by providing theoretical and practical skills on Energy Efficiency and Active Demand Side Management with the latest smart grid technologies. Congratulations to the organizers.

ACTIVITIES TO STUDENTS BY FACULTY



CLUB ACTIVITIES

"War of Words" was a debate challenge that was conducted passionately by Green energy Club. The Department of Electrical and Electronics, on 11th Nov 2020 to bring out the best and to acquire knowledge on various topics and enhance the participants communication and debating skills.
Around 60 participants participated and the winners were Arnab Goswami, Shruthi Singh, Swati and Nayrah from NHCE. Congratulations to Green Energy club members and the club coordinator Mr.Vinod kumar s for successful conduction of the event.

"GREEN FEST-2020" that was conducted by the Green energy Club, Electrical and Electronics Department, on 14TH and 15TH of December,2020 to bring out the best of the participants, to acquire knowledge on various topics and enhance the participants communication skills, creative skills and their knowledge about various locations. Four events were planned POSTER MAKING, DECIPHER, WHERE AM I??, THOUGHT BULB. Around 150 participants participated for the two days event. The event was inaugurated by HOD, Dr. M Mahesh in the presence of faculty coordinator, Mr. Vinod Kumar S and all the participants. The event was hosted by Soumyashree, Shariq Ahmed and Likitha, members of the Green Energy Club.

WINNERS OF GREEN FEST-2020

The winners of the POSTER MAKING HANDMADE:

1. Deepak Yadav - M39
2. Harshita Mahapatra - P14
3. VimarshaRudresh - M32

DECIPHER:

1. Sabreesh S - 1NH18AU047
2. Vishwas K – 1NH19EC757
3. Jennifer - 1NH19EC044

THE WINNERS OF WHERE AM I??:

1.Swathi R - 0-04
2.Ankita tandon - 1NH18CS023
3.Shivini Sampath - 1NH18CS745

THE WINNER OF THOUGHT BULB:

1. I Jennifer – 1NH19EC044
2. Akangsha Das – I-13
3. Shruti Singh – M19 & Swati R – 0-04

The event was successfully completed with vote of thanks by Mr. Vinod Kumar S. All the participants were provided with the E-certificates. This event engaged the students in a fun filled activity and also helped them bring out their thoughts on the environmental issues and the current affairs.

NOVEMBER- DECEMBER EVENT

In this program 'SoftVidya' the expert faculties of Electrical and Electronics Engineering Department have voluntarily given their precise time for the students to teach the various software tools used in real time application in 'Engineering' domain.

The main aim of the program was to understand the conceptual as well as practical knowledge of electrical domain & latest technologies being used to achieve the same. Learning various tools available for modelling & simulating different real time applications in 'Electrical & Electronics Engineering' domain.

Also understand the conceptual as well as practical knowledge of industrial & latest technologies being used to achieve the same.

The sessions were handled by Dr.Vitnothkumar, Dr.Gunapriya, Dr.Singaravelan, Dr. Prabhakaran Ms.Anitha A and Ms.Deepa V B on various software tools from 11th November 2020 to 16th December 2020 two days a week.

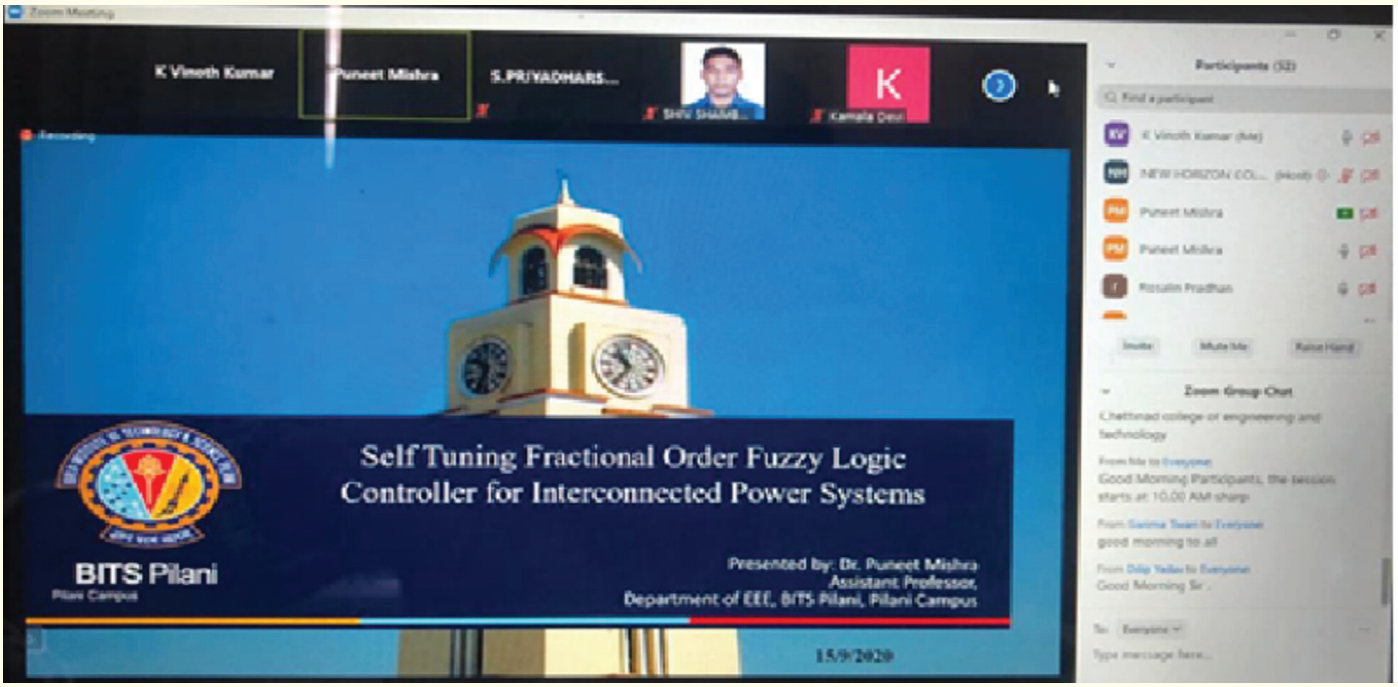
The event was organized by Ms. Deepa V B, Dr. Vinoth Kumar S under E-Soft club and coordinated by following student members of the club. Md. Sagar Khan-Vice President, Ashwini L B-Treasurer Md. Numan Bhat-Core Member, Sarthak Das-Core Member Prajwal- Core Member, Utkarsh K A- Core Member.

The event was successfully completed and addressed by HOD Dr.M. Mahesh with vote of thanks by Ms.Deepa V B. All the participants were provided with the E-certificates. Congratulating all for successfully completing the program.

FACULTY DEVELOPMENT PROGRAM

The Department of EEE organized on Research Challenges in Renewable Energy Technologies – RCRET-2020, from 14th to 20th of September 2020, 10 AM (IST) for Faculties, Research Scholars from Inside and Outside Engineering Colleges / Universities and Industry, via online ZOOM platform. Congratulations to organizer Dr.Vinothkumar K.

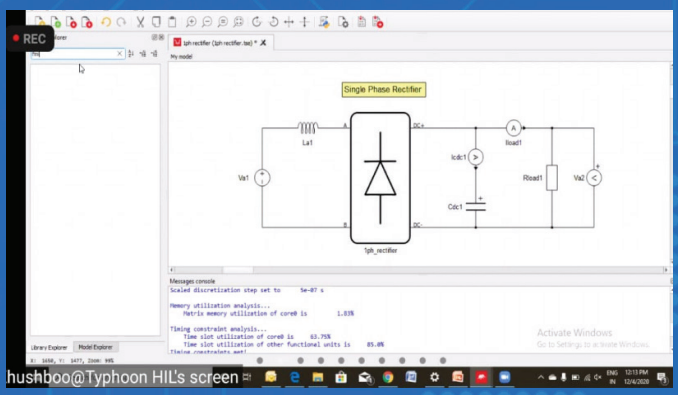
The seven days Faculty development program focused on Recent advances in Smart Grid Technologies, Intelligent Controller in Solar Energy, Research Challenges in Wind Energy Conversion Systems, Integration of Renewable energy sources to Grid, Machine Learning for Smart Grid, An insight to VFD based centrifugal pump efficiency improvementsand was conducted successfully with positive feedback from participants.

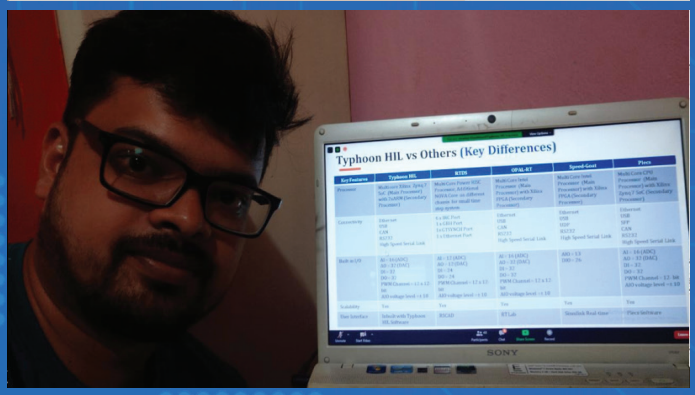


Pic: online FDP-Research Challenges in Renewable Energy Technologies

WORKSHOP
DECEMBER EVENTS

The Department of EEE organized "Real-time Simulation Tool for Electrical Engineers-Typhoon HIL" an online workshop aimed to provide hands-on experience on the Hardware in the Loop (HIL) Emulator & Software. Also provided the registered participants the licensed version of Typhoon HIL software during the workshop &provided an exposure to the energy applications like smart grid, renewable energy and distributed generation, etc.
The workshop includes practice sessions on the HIL real- time simulation, modelling of single-phase inverter, modelling and simulation of MPPT Boost Charger & Micro Grid controllers and so on as listed in brochure below.
Congratulations to Organizing team Mr. Satishkumar D and Mr. Muniprakash.T.





Pic : Real-time Simulation Tool for Electrical Engineers-Typhoon HIL" an online workshop

SEPTEMBER EVENTS:

Department of EEE organized 4-Days Online Hands-on Workshop using MATLAB & SIMULINK-Research Perspective, from 1st to 4th of September 2020, in two Session from 10 AM to 12 PM & 2 PM to 4 PM for Research Scholars and faculty of all the engineering colleges.
Simulation is a key part of the Power Electronics and Electric drives design and analysis process. It helps the design engineer to have a better understanding of the circuit operation and possible problems can be discovered in the early phase of the design process. The workshop is to facilitate the modeling of Power Electronics and Drives using MATLAB and SIMULINK in an elegant way and to enrich the participant's technical skills and was conducted successfully-certificates are provided to participants. Congratulations to Organizing team Dr.MohanDas , Mr. Satishkumar D and Mr.Vinodkumar S faculty of EEE.

Pic: MATLAB & SIMULINK-Research Perspective, an online workshop

WORKSHOP

OCTOBER EVENTS:

Department of Electrical and Electronics Engineering, New Horizon College of Engineering, Bengaluru, organized National Webinar on "E-Mobility in India" in association with Skill Shark Edu Tech Pvt Ltd., Hyderabad on 26th October 2020, 11:00 AM to 12:30 PM (IST) for industry People, faculty of all the Engineering colleges and Students.Congratulations to organizer Mr. Satishkumar D.

The topics discussed during the webinar are

•Indian Transportation Industry Overview and Future of Mobility in India

•Global and Indian EV Market Segmentation and Types of Electric Vehicles and Key Market Players of Indian EV Industry, EV Ecosystem.

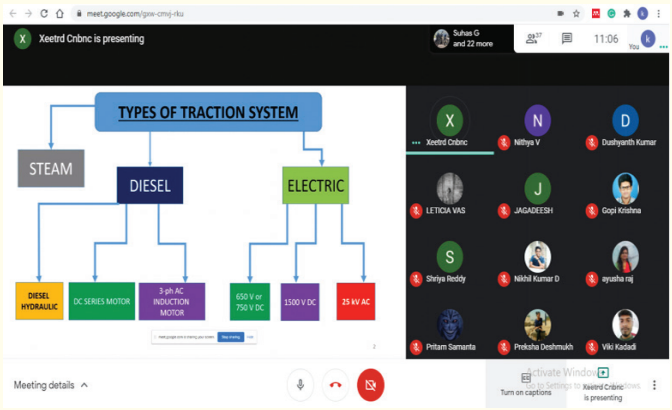
Pic: National Webinar on "E-Mobility in India"

EXPERT/GUEST LECTURE

DECEMBER EVENTS :

The Department of Electrical and Electronics Engineering organized a Guest Lecture on "Electric Traction Systems & Employment Opportunities In Indian Railways" on 10th December 2020 through Google-meet online platform. This guest lecture is a part of a curriculum named Utilization of Electrical Energy (EEE741) for the VII semester students. The guest speaker was Mr C.T ANTO, Electrical Executive Engineer, Indian Railways, South Western Railway, Bengaluru. The speaker explained the practical concepts of electric traction and the traction control in Indian railways. He has given the details of employment opportunities in Indian railways which motivated the students in many aspects.

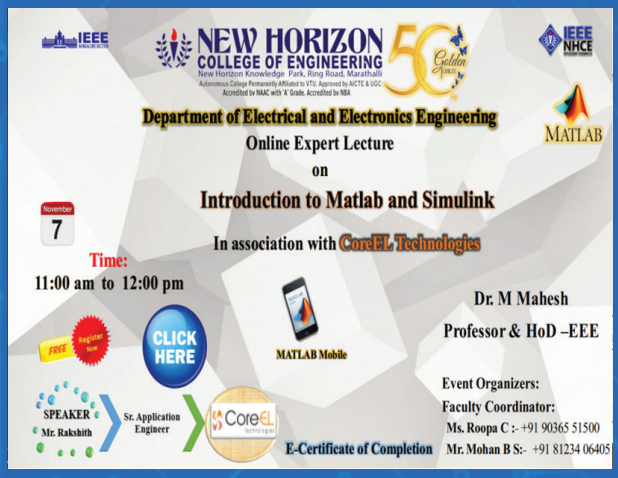
The Department of EEE organized a guest lecture on "Applications of Signal Processing " on 11th December 2020, organized by faculty Mrs.Rashmi N, for 5th semester EEE students. The resource person Dr.Guruprasad S holds a doctorate in field of signals and systems.
The session was interactive, students interacted with experts for clarifying all their doubts. Session provided a platform to students to express their ideas, clarify doubts, gain knowledge of image processing applications and which gives a practical approach to their course. The participants admired the session and gained knowledge. Congratulation to organizer.



Pic: Online guest lecture event for EEE 7th semester students

Pic: Online guest lecture event for EEE 5th semester students

NOVEMBER EVENTS:

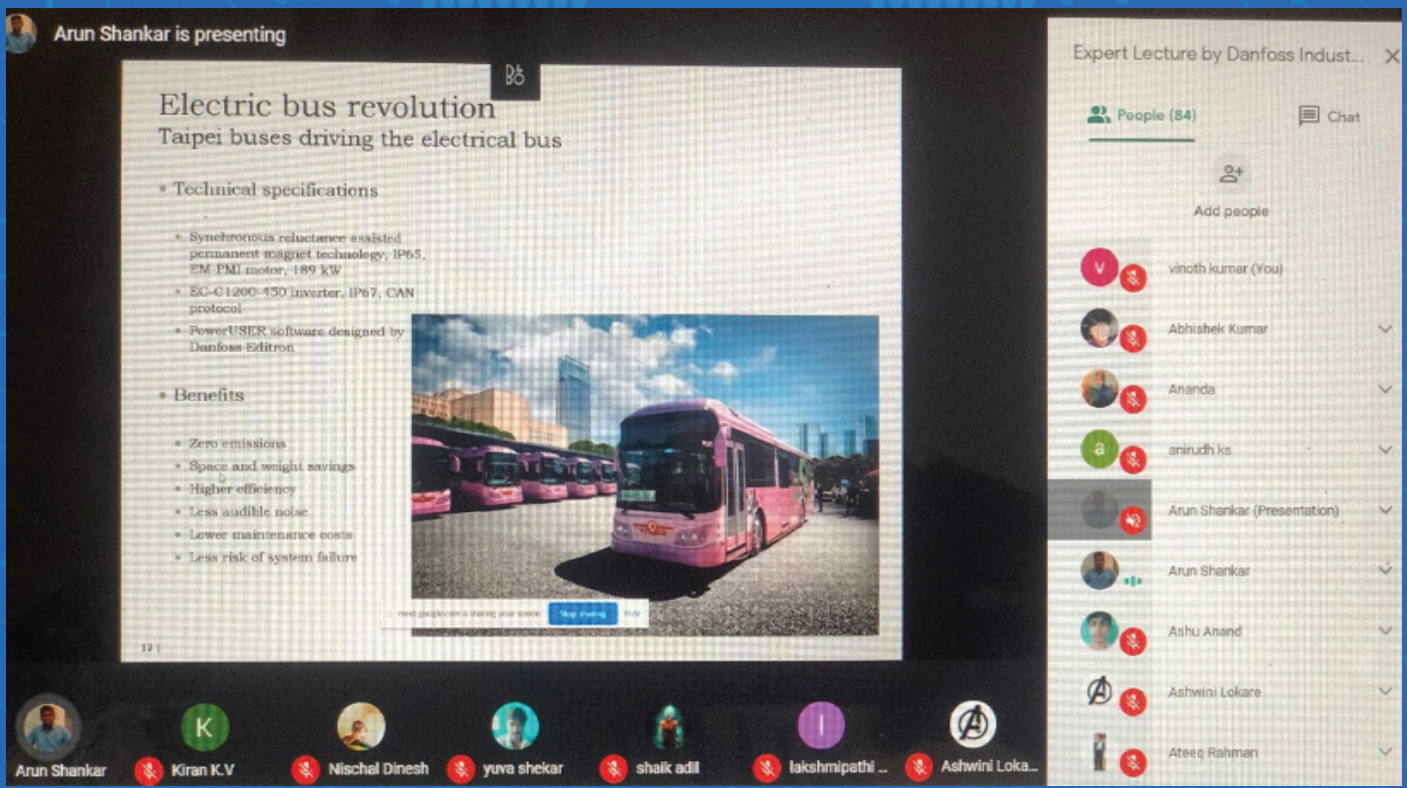


Pic: Expert Lecture on- Introduction to Matlab and Simulink

The Department of EEE, New Horizon College of Engineering organized an online Expert Lecture on Introduction to Matlab and Simulink-7th November 2020, for 3rd semester students, from the expert lecture, students will be able to know what MATLAB / Simulink is and how to get started with MATLAB/Simulink. Basics of MATLAB/Simulink to solve simple and complex problems. Congratulations to organizers.

The Department of EEE, New Horizon College of Engineering organized an Expert Lecture on "Role of Synchronous Machines in Industry" in association with Danfoss Industries Pvt Ltd, Chennai on 04th November 2020 at 10AM – 12 PM (IST), will defined the concept of current research trends in synchronous machines in industry. Mr. V.K Arun Shankar, Testing Engineer, Danfoss Drives Segment - R&D (SW), Sriperumbudur served as resource person for an Expert Lecture and delivered a speech on a large collection of synchronous motors and generators is available with a wide range of industrial applications. He also mentioned that electric motors have become an integral part of industrial production and convert electrical energy into mechanical energy, enabling industrial machines to perform the tasks assigned to them. Not all the electric motors perform a similar set of tasks, but some of them are specifically designed for an industry. Typical applications of these low power motors are positioning machines. They are also used in robot actuators and such motors are available in a range from horseshoe size to industrial high performance size.

The program covered the following important aspects namely applications of synchronous machines in Danfoss. The eminent expert from Industry delivered the lecture and his talk has been very well received by the participants.



Pic: Expert Lecture on "Role of Synchronous Machines in Industry"

INDUSTRIAL VISIT

DECEMBER EVENT:

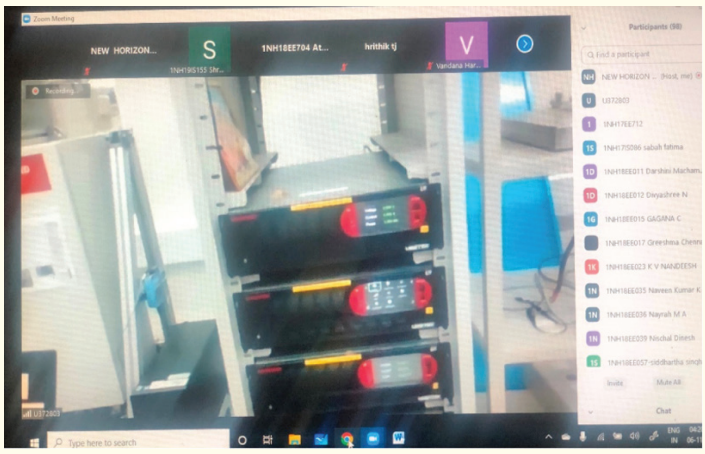
The Department of EEE organized virtual industrial visit from 400kV/220kV substation KPTCL on 10th Dec 2020 at 2PM onwards via ZOOM online platform for the 5th & 7th semester students of EEE dept. of NHCE.

Resource people are engineers of substation Nelamangala, accepted our request to organize the session of substation visit which was needed during this pandemic to the students. The Session brief about single diagram of substation and connected equipments. Students viewed live equipments like CT, PT, circuit breakers, reactors bay etc and operations are briefed by junior engineer and execute engineer. Also, assistant engineer explained about power sector connection. All this made a session informative, interesting and gained knowledge to the participants.

Almost nearly 115 students from 5th semester and 124 students participated from 7th semester EEE. Congratulations to organizer Mrs.Rashmi N, faculty of EEE Department for interacting and getting permission from the engineers to organize the event with a grand success.

Pic: virtual industrial visit from 400kV/220kV substation via ZOOM online

The Department of EEE, New Horizon College of Engineering organized an Industrial Visit in association with Danfoss Industries Pvt Ltd, Chennai on 6th November 2020 through Virtual Online mode by ZOOM Platform. Mr. V.K Arun Shankar, Testing Engineer, Danfoss Drives Segment - R&D (SW), Sriperumbudurdemonstrated the experimental setup at Software Testing Laboratory, R&D sector. He explained an NI-Test stand based VFD test setup, Power card and Option cards testing Setup, Hardware in Loop test setup, Aqua Pump setup for VFD, Drive efficiency Test setup and Intelligent Motor Control of synchronous motors and generators is available with a wide range of industrial applications.



Pic: virtual industrial visit from Danfoss Industries Pvt Ltd. Sriperumbudur

The program covered the following important aspects available in Danfoss. The eminent expert from Industry delivered the lecture and his talk has been very well received by the participants and nearly 115 students participated from III B.E EEE, ISE, Mechanical branch 5th semester.

NEW HORIZON COLLEGE OF ENGINEERING

VISION

To emerge as an institute of eminence in the fields of engineering, technology and management in serving the industry and the nation by empowering students with a high degree of technical, managerial and practical competence.

MISSION

- To strengthen the theoretical, practical and ethical dimensions of the learning process by fostering a culture of research & innovation among faculty members and students.
- To encourage long-term interaction between the academia and industry through their involvement in the design of curriculum and its hands-on implementation.
- To strengthen and mould students in professional, ethical, social and environmental dimensions by encouraging participation in co-curricular and extracurricular activities.

QUALITY POLICY

- To provide educational services of the highest quality both curricular and co-curricular to enable students integrate skills and serve the industry and society equally well at global level.

VALUES: Academic Freedom, Integrity, Inclusiveness, Innovation, Professionalism, Social Responsibility